The Sanitation Facilities Construction Program
of the Indian Health Service

Public Law 86-121

Annual Report for 2005

U.S. Public Health Service
Department of Health and Human Services

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Annual Report for 2005

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Preface

The Indian Health Service (IHS) Sanitation Facilities Construction (SFC) Program continues to identify and report the sanitation needs of American Indians and Alaska Natives while carrying out a Program to meet those needs in cooperation with tribal governments. Those needs are summarized in this report as well as some of the accomplishments of the Program during the reported fiscal year. The Program's continuing challenges include improving community water supplies, waste water treatment systems, and solid waste disposal facilities in culturally diverse and often times remote areas--from Alaska to Florida and from Maine to California. The projects highlighted in this report illustrate typical SFC Program efforts in addressing these specific challenges.

Since the passage of Public Law 86-121 in 1959, the SFC Program has worked in partnership with tribal governments to construct essential sanitation facilities. As a result of over 46 years of cooperative efforts, many tribes have developed the administrative and technical capability to construct their own sanitation facilities with engineering support from IHS. The majority of all the SFC Program's construction work is accomplished by either tribes, tribal organizations or Indian-owned construction firms. A number of tribes continue to assume responsibility for their respective SFC programs, while the SFC Program continues to work with tribes and others to support the tribal Self-Governance/Self-Determination decision making process under the authority of the Indian Self-Determination and Education Assistance Act. One goal of the SFC Program is to make available program information in a more open, accurate, and efficient way; this report, prepared annually since 1993, is one means of achieving that goal.

The Sanitation Facilities Construction Program

Introduction

On July 31, 1959, President Dwight D. Eisenhower signed Public Law (P.L.) 86-121. Under this Act, the Surgeon General is authorized to construct essential sanitation facilities for American Indian and Alaska Native homes and communities. Since 1959, over 270,000 homes have been provided sanitation facilities and this achievement has had a significant impact on the health of Native Americans. The gastroenteric and post-neonatal death rates among the Indian people have been reduced significantly, primarily because of the increased prevalence of safe drinking water supplies and sanitary waste disposal systems.

The authority vested in the Surgeon General by P.L. 86-121 was transferred to the Secretary, Health, Education, and Welfare (HEW), by Reorganization Plan No. 3 of 1966. The Secretary of HEW was re-designated Secretary of Health and Human Services by Section 509(b) of P.L. 96-88 in 1979. The authority was delegated to the Director, Indian Health Service, by the Reorganization Order of January 4, 1988 (52 FR 47053), which elevated the IHS to a Public Health Service (PHS) Agency.

The Sanitation Facilities Construction (SFC) Program is unusual among Federal programs because IHS personnel work cooperatively, as close partners, with tribes in providing essential sanitation facilities to Indian communities and Alaska villages. Enhancing tribal capabilities and building partnerships based on mutual respect are the major keys to the success of the SFC Program.

Protecting the health of and preventing disease among American Indian and Alaska Native populations are primary IHS objectives. In the clinical environment, physicians, dentists, nurses, and other medical care providers work to restore the health of ill patients. However, preventing illness is clearly the most effective way to improve health status. Improving the environment in which people live and assisting them to interact positively with that environment results in significantly healthier populations. Providing sanitation facilities and better quality housing are environmental improvements that have proven track records in that regard.

The SFC Program Mission

Today, as it has for over 46 years, the SFC Program continues to provide assistance to the American Indian and Alaska Native people in eliminating sanitation facilities deficiencies in Indian homes and communities.

The IHS mission is to raise the health status of American Indian and Alaska Native people to the highest possible level. To carry out its mission, the IHS provides comprehensive primary and preventive health services. The SFC Program supports the IHS's mission by providing engineering, technical, and financial assistance to Indian tribes and Alaska Native villages (tribes) for cooperative development and continued operation of safe water, wastewater, and solid waste systems and related support facilities. In partnership with the tribes, the SFC Program:

Figure 1: Construction of a septic system, 1960's.

1. *Develops and maintains an inventory of sanitation deficiencies in Indian and Alaska Native communities for use by IHS and to inform Congress.*

2. *Provides environmental engineering assistance with utility master planning and sanitary surveys.*

3. *Develops multi-agency funded sanitation projects; accomplishes interagency coordination; assist with grant applications; and leverages IHS funds.*

4. *Provides funding for water supply and waste disposal facilities.*

5. *Provides professional engineering design and/or construction services for water supply and waste disposal facilities.*

6. *Provides technical consultation and training to improve the operation and maintenance of tribally owned water supply and waste disposal systems.*

7. *Advocates for tribes during the development of policies, regulations, and programs.*

8. *Assists tribes with sanitation facility emergencies.*

Tribal Involvement

The SFC Program employs a cooperative approach for providing sanitation facilities to American Indian and Alaska Native communities. During fiscal year (FY) 2005, tribes, tribal organizations or Indian-owned construction firms administered approximately $92 million in construction funds. Many tribes participated by contributing labor, materials, and administrative support to projects.

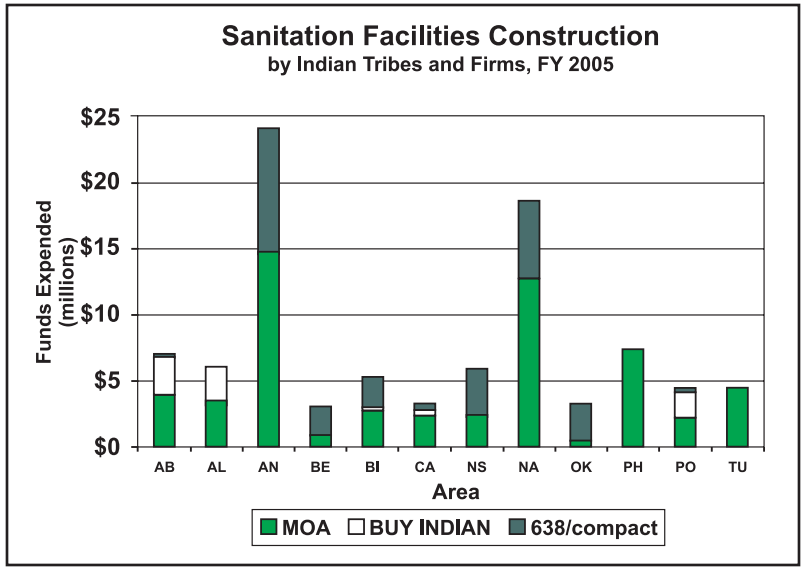

Figure 2: Funds expended by Indian and Alaska Native tribes and Indian-owned firms in FY 2005, by IHS Area.

Figure 3: Kickapoo ribbon cutting for completed point-of-use water treatment station funded by EPA Region VI.

Each sanitation facilities construction project is initiated at the request of a tribe or tribal organization. Consultation with the tribal government is maintained throughout every phase of the construction process, from preliminary design to project completion. Operation and maintenance of these facilities by the American Indian and Alaska Native people, with ongoing technical assistance from IHS, ensures the long-term health benefits associated with improved sanitation conditions. In addition to construction work, a number of tribes assumed responsibility for the administration of their own SFC Program. Under Titles I and V of P.L. 93-638, the Indian Self-Determination and Education Assistance Act, as amended. Tribes from the

Anchorage, Billings, California, Nashville, Oklahoma City and Phoenix Areas are managing their own SFC Program through Self-Governance compacts. (Table 1).

The IHS, SFC Program seeks the advice and recommendations of the national Facilities Appropriation Advisory Board and Area-specific Tribal Advisory Committees. These groups review program policies and guidelines and provide input on the future direction of the SFC program.

Figure 4: Pinetop-Lakeside Sanitary District manage discusses the towns composting sewage sludge and municipal waste to Phoenix Area engineers.

TABLE 1
Tribes That Managed the SFC Program in FY 2005 Under Title I or V of P.L. 93-638, as Amended

IHS Area	Tribe
Anchorage	Alaska Native Tribal Health Consortium
Billings	Confederated Tribes of Salish & Kootenai (Flathead)
	Rocky Boys (Chippewa-Cree)
California	Hoopa Valley Tribe
Nashville	Chitmacha Tribe of Louisiana
	Mississippi Band of Choctaw Indians
	St. Regis Mohawk
	Eastern Band of Cherokee
Navajo	*Navajo Nation
Oklahoma City	Cherokee Nation of Oklahoma
	Absentee Shawnee Tribe of Oklahoma
	Choctaw Nation of Oklahoma
	Chickasaw Nation of Oklahoma
	Wyandotte Tribe of Oklahoma
	*Modoc Tribe of Oklahoma
	The Seminole Nation of Oklahoma (in Chickasaw Compact)
Phoenix	Ely Shoshone Tribe
	*Gila River Pima-Maricopa Indian Community
	Yerington

* Title I

"The Year" in Review

In FY 2005, over $91.7 million was appropriated for the construction of sanitation facilities. In addition to those appropriated funds, the SFC Program received more than $40.4 million in contributions from other Federal agencies including the Environmental Protection Agency (EPA) and from non-Federal sources such as tribes and State agencies. With these contributions, the SFC Program's construction budget for the fiscal year totaled more than $132 million.

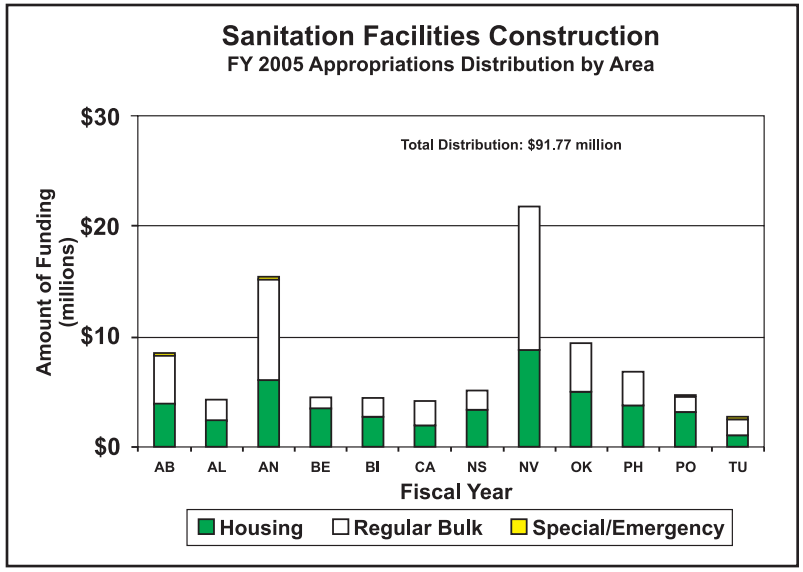

Figure 5: Distribution of SFC Project appropriations, by Area, for FY 2005.

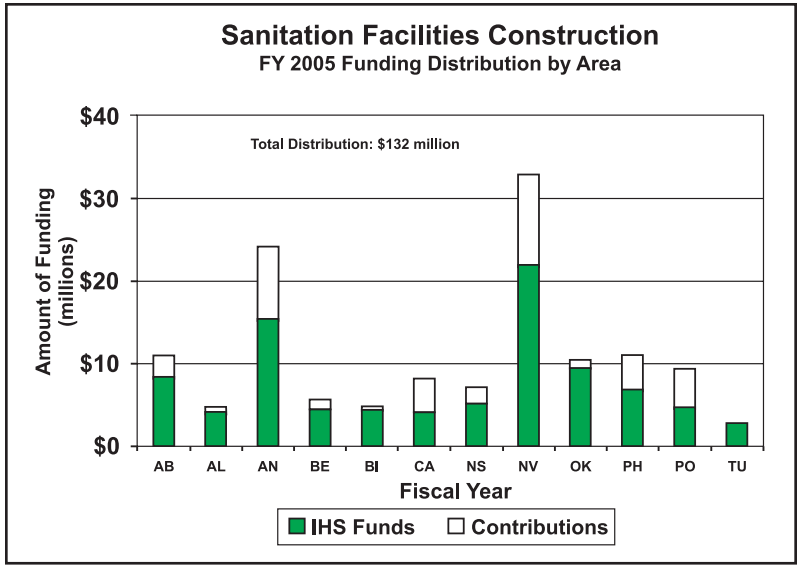

Figure 6: Total distribution of SFC Project funds in FY 2005, including all contributions and HUD funds.

Using the appropriated and contributed funds, the SFC Program initiated 447 projects to provide essential sanitation facilities to an estimated 2,395 new and like-new homes, 2,029 existing first service homes and 19,648 existing homes. The new housing units provided with sanitation facilities included 23 HUD-sponsored units (served with contributed funds), 123 Bureau of Indian Affairs-Home Improvement Program (BIA-HIP) sponsored units, and 2,249 units constructed by tribes, individuals, and other entities. In FY 2005, the SFC Program provided sanitation facilities to a total of 24,072 homes. These statistics are summarized in Table 2 on the following page.

TABLE 2
IHS Sanitation Facilities Construction Program Statistics for FY 2005

SFC Program Budget:

IHS SFC Appropriation =	$	91,767,165
HUD Contributions (Housing + CDBG*) =	$	156,908
Other Contributions =	$	40,241,243
Total Funding in FY 2005 =	$	132,165,316
Total IHS SFC Appropriations since 1959 =	$	2 billion

SFC Projects:

Number of Projects Undertaken in 2005 =	447
Total Number of Projects Undertaken since 1959 =	12,395

Homes Provided Sanitation Facilities in FY 2005:

• Number of New and Like-New Homes Served	
HUD-sponsored Homes =	23
BIA-sponsored Homes =	123
Tribal and Other Homes =	2,249
Subtotal	2,395
• Number of Existing First Service Homes Served =	2,029
• Number of Previously Served Homes Provided Upgraded Sanitation Facilities =	19,648
Total Number of Homes Served in 2005 =	24,072

*CDBG-HUD Community Development Block Grant program

Homes Provided Sanitation Facilities since 1959:

• Number of New and Like-New Homes	
HUD-sponsored Homes =	61,412
BIA-sponsored Homes =	22,822
Tribal and Other Homes =	76,368
Subtotal	160,601
• Number of First Service Existing Homes =	109,428
Total Number of Homes Served =	270,029

Sanitation Deficiency System (SDS) Information:

Total Estimated Cost of Sanitation Deficiencies =	$2 billion
Total Estimated Cost of Feasible Projects =	$990 billion
Total Number of Projects/Phases Identified =	3,052
Number of Feasible Projects Identified =	2,249
Estimated Total Number of Existing Homes Without Potable Water =	38,692
Estimated Total Number of Homes That Lack Either a Safe Water Supply or Sewage Disposal System, or Both (Deficiency Levels 4 and 5) =	42,772

Figure 7: Water well drilling in Fairbanks, Alaska.

Six sanitation facilities construction projects are highlighted on the following pages. These projects represent a small fraction of the total construction workload undertaken by the SFC Program. They were selected to illustrate typical cooperative efforts undertaken by IHS, the tribes, and other Federal and state agencies to provide safe water supply, sanitary sewage disposal, and solid waste facilities for American Indian and Alaska Native homes and communities.

Figure 8: Sanitary survey at Kickapoo Tribe of Kansas water treatment plant performed by LT Joe Jones and LCDR David Hogner.

Jemez Water System Improvements
Pueblo of Jemez, New Mexico

The Pueblo of Jemez is located in central New Mexico. For several decades, the Pueblo of Jemez's public drinking water supply met primary drinking water standards, but did not meet the secondary standards for iron and manganese. Additionally, the potable water did not meet the new and more stringent standards for arsenic. To address these problems, as well as improve the overall performance and reliability of the water system, the IHS and EPA funded several infrastructure improvement projects to drill a new well, build a raw water transmission line, a water storage tank, and a water treatment plant.

Figure 9: Jemez filtration installation during building construction.

The IHS drilled a new well to provide a reliable back-up source to the original well drilled circa 1960. Unfortunately, similar water quality issues were present in this second well. It was decided that a filtration plant would be required to provide the water quality improvements that the Pueblo had long been seeking.

Figure 10: Jemez filter equipment under review.

As part of filtration media selection, a six month pilot-plant study was conducted. Results indicated that iron, manganese and arsenic concentrations could all be reduced to below the drinking water MCL's utilizing a proprietary adsorptive filter media system that incorporates chlorine as the oxidant.

The IHS installed 1.5 miles of 8-inch transmission water line from the well to the filtration plant, which insures proper disinfection before consumption, to a new storage tank.

In the late 1990's, homes were constructed in a higher elevation area of the pueblo and providing water service with adequate pressure to that area was become difficult. The EPA funded and the IHS constructed a 365,000 gallon, 79-foot tall standpipe storage tank that provided additional storage capacity that was needed by the whole community and also provide a higher pressure zone to the higher elevation areas of the pueblo where additional homes were constructed.

This whole system is controlled by a Supervisory Control and Data Acquisition (SCADA) system that controls, monitors and records the operation of each well, the filtration plant and the water level in the water storage tank. The system can be monitored in both the filtration building and the public works department. The SCADA system automatically adjusts the operation of the water system and well pumps based on the demand of the community and continually records the storage tank levels.

Through the coordinated efforts of the IHS, the Pueblo of Jemez, and the EPA, this project has provided the Pueblo of Jemez with a reliable community water system that meets production, pressure, distribution, storage requirements, and water quality standards.

Figure 11: Jemez 365,000 gallon storage tank installation of the roof section.

Savoonga Water and Wastewater Improvements
Savoonga, Alaska

The Native community of Savoonga, Alaska, is located on St. Lawrence Island, in the Bering Sea, approximately 165 miles west of Nome and 75 miles southeast of Siberia. Passenger and freight access to this extremely remote arctic island village is by aircraft or barge. The island experiences a dark, frozen, winter climate during most of the year with temperature extremes varying from 50 degrees below zero in winter to 80 degrees in summer.

The island has been intermittently inhabited for 2,000 years by Alaskan and Siberian Yupik Eskimos. The community of 650 is 95% Native and is situated on gently sloping tundra underlain by permafrost and large boulders.

This project was a $12.7 million effort to bring piped water and sewer to the community's 180 homes. This project provided villagers with indoor plumbing for the first time. Formerly, villagers disposed of waste in honey buckets. Honey buckets are five-gallon pails that rural Alaskans use instead of toilets if they lack indoor plumbing or outhouses. Buckets are then carried to sewage collection points or lagoons and emptied.

Figure 12: Rural Alaskan construction project typically use local labor, thereby providing jobs in communities that have limited economic opportunity.

Villagers practice a traditional subsistence lifestyle of walrus, whale, seal, and reindeer hunting. Considering the community's limited utility management resources, the sanitation facilities were designed to be simply and reliably operated and maintained.

Savoonga's soil characteristics (permafrost) prohibit burying utilities and require using an aboveground water distribution system and vacuum sewage collection system. Water is treated, heated, and carried in a circulating loop within two 6-inch diameter high-density polyethylene pipes (HDPE) that run parallel to a 6-inch diameter HDPE vacuum sewage line, thereby preventing the sewage line from freezing. All three pipes are placed within insulated aluminum utilidors that are supported on wooden "sleeper pads," which enable the occasional re-leveling of utilidors as surface soil conditions change.

Aboveground utilities must not limit the mobility of people and vehicles; therefore, pedestrian and small vehicle crossings were incorporated into Savoonga's utilidor design.

Figure 13: Permafrost (permanently frozen soil, commonly found in arctic regions) requires using aboveground water and sewer utilidors; service lines then branch off to connect to homes.

The constructed sanitation facilities include: a combined water treatment plant and sewage vacuum station, 15,000 feet of aboveground insulated utilidor, service lines to 180 homes, 4,200 feet of sewer force main, and a six-acre facultative lagoon.

Figure 14: View of Savoonga's overall community.

Figure 15: View of the sewage vacuum station equipment.

Northern Lights Sewer System Improvements
Leech Lake Reservation, Minnesota

The Leech Lake Band of Ojibwe (LLBO) is one of the six member tribes that comprise the Minnesota Chippewa Tribe. Situated in north central Minnesota, the Leech Lake Reservation encompasses approximately 602,889 acres. In recent years, the LLBO has undertaken an aggressive policy of improving the water and sewer infrastructure on the reservation utilizing federal, state, and tribal resources to meet the growing needs of reservation. Successful gaming operations as well as other business ventures has led to an increased demand for housing on the reservation.

In late 2004, the Leech Lake Housing Authority (LLHA) requested technical assistance for the water and sewer infrastructure to serve 10 low rent duplex housing units.

Figure 16: Leech Lake Band Public Works staff with new well drilling rig.

Soil evaluations conducted by IHS staff determined that soil conditions were not well suited to onsite systems.

IHS reviewed the project, and proposed a gravity sewer collection system that would connect to the nearby Northern Lights Casino complex. It was determined that sufficient excess capacity existed within the existing infrastructure at the casino. The housing authority, public works, and casino representatives negotiated the terms of the project and the plan was approved in May 2005.

Figure 17: Leech Lake Band Public Works staff installing gravity sewer main .

It was determined that the tribes Public Works Department would construct the project, the IHS would provide onsite inspection and technical assistance to the crew throughout the project. Construction began on September 3, 2005 and a final inspection was held on November 7, 2005.

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San Juan Main Pueblo Water System Improvements
San Juan Indian Reservation, New Mexico

The San Juan Main Pueblo water system includes the Kennedy community well, pumphouse, and 110,000-gallon water storage tank, and the Main Pueblo pumphouse, two community wells, and a 150,000-gallon water storage tank. The water distribution mains in the system consisted of PVC and asbestos cement (AC) pipe ranging from 2-inches to 6-inches in diameter with the majority of the mains being 4-inches in diameter. The 260,000 gallons of storage was inadequate.

Figure 18: Local tribal members and AJAC personnel constructing the concrete ring foundation for the water storage tanks.

To correct storage deficiencies, two 250,000 gallon water tanks were constructed to provide three days of storage for the current population and fire flow at 1,000 gallons per minute for 60 minutes. Two tanks were needed to allow for operation and maintenance of one tank while the other provided water to the system. To address low pressure zones, tanks were located at an elevation which would provide adequate pressure in the water distribution mains.

Figure 19: Trenching for the new waterline that will carry water to the new tanks.

In addition to new tanks, a Supervisory Control and Data Acquisition (SCADA) system was installed. The SCADA system consists of a pressure transducer and radio telemetry at the base of the tanks, a programmable logic controller (PLC) and radio telemetry at each pumphouse, and a computer for operational control in the Tribal Utilities Office Building. Based on the water levels in the new water storage tanks, the pressure transducer and controls will initiate the well pump on/off cycles. The SCADA system will also transmit system data such as tank level, pump on/off cycles and run times, and other information to the computer located in the utility building. The computer will allow operators to operate and monitor the water system from their office and maintain records of system performance.

Future project components include video recording and improving all three wells, replacing the three well pumps, and installing pressure transducers in each well and connecting them to the SCADA system to monitor ground water levels. As part of the San Juan Pueblo's in-kind contribution, the Tribal Utility Department (Ohkay Owingeh Utility Department) will replace approximately 4,400 linear feet of undersized water mains in the main pueblo area with 8" PVC water main.

Figure 20: An automated controls system is being installed to control and monitor the water system and to allow operations control from the Utilities Department office.

Figure 21: The two completed 250,000 gallon water tanks.

Ganado Regional Water System Navajo Indian Reservation, Arizona/New Mexico/Utah

The Navajo Indian Reservation (NIR) is located in northeastern Arizona, western New Mexico, and southeastern Utah. The NIR is the largest Reservation in the country taking up an area equal to approximately 27,000 square miles. All community utilities, including water systems, on the Navajo Indian Reservation are operated and maintained by the Navajo Tribal Utility Authority (NTUA).

The Jeddito Chapter of the NIR is a small "island" Navajo Chapter enclosed on all sides by the Hopi Indian Reservation. In recent years, the Jeddito Chapter has experienced water shortages so severe during the warmer, summer months that the NTUA instituted water hauling from communities as far away as 20 miles. The IHS proposed, and carried out, hydrogeologic investigations to locate additional water sources within the Chapter but a water source of the necessary quality and quantity was not found.

The Navajo Area IHS (NAIHS) was already in the process of extending the Ganado Regional Water Systems west of Ganado Chapter with 30 miles of waterline extension to serve 100 residents. This project brought the Ganado Regional Water System to within 8 miles of the Jeddito Chapter. The Hopi Community of Yu Weh Lu Paki lies along Arizona Highway 264 between the Ganado and Jeddito Chapters of the NIR. The Yu Weh Lu Paki community water system currently serves 25 homes and is operated and maintained by the community itself. The Phoenix Area IHS (PAIHS) was in the process of finding higher quality water for the Yu Weh Lu Paki community.

Figure 22: Surveying for the proposed extension.

For these reasons, it was proposed that the Ganado Regional Water System, which possesses a large supply of high quality water, be extended further west along Highway 264, through the Yu Weh Lu Paki Community to Jeddito. The existing NAIHS waterline project was amended to include an additional eight miles of waterline, and upgrades to two existing booster stations in the Ganado Regional Water System. The extended transmission line will serve both the Jeddito and Yu Weh Lu Paki communities with a safe supply of water.

The PAIHS will use the funding for the proposed water treatment system to upgrade the existing Yu Weh Lu Paki community water system. Any funds remaining after the completion of these upgrades will be contributed to necessary upgrades to the Ganado Regional Water System.

Once the upgrades are complete, the NTUA will take over operation and maintenance responsibilities for the Yu Weh Lu Paki system.

Since the 8 miles of additional waterline will use the existing Arizona Department of Transportation (ADOT) right-of-way along Arizona Highway 264, and will pass through a portion of the Hopi before it reaches Jeddito, this project required the coordination of the Navajo and Phoenix IHS, the Navajo Nation, the Hopi Nation, and the ADOT. The project will serve 343 homes; 100 first service homes before entering the Hopi reservation, the Yu Weh Lu Paki Hopi Community of 25 homes, and 218 homes in the Jeddito Chapter. To date, the amended NAIHS project has reached the Hopi Reservation border.

Figure 23: Preparing for a road bore to extend the 14 inch waterline.

Figure 24: IHS Engineer inspects the road bore.

The total cost estimate for the entire project is $2,974,000. The NAIHS contributed $1,335,500 and the Navajo Nation contributed CDBG funds of $1,138,500 to the Navajo Reservation side of the project. The PAIHS funding was acquired through various funding agencies (e.g., Rural Utility Service) and totals $500,000 for the Hopi Reservation side of the project.

Squaxin Island Community Water System Phase I
Village of Tatitlek, Alaska

The Village of Tatitlek, an Alutiiq village first reported in 1880, is located on the northeast shore of the Tatitlek Narrows on the western side of Prince William Sound. The coastal community of 107 people receives 28 inches of rain and 150 inches of snow annually. The water source for Tatitlek is a 20-foot by 9-foot dam in the mountains, 1.5 miles from the village. The existing water treatment plant had exceeded its useful design life and did not comply with the surface water treatment rule. A project was proposed to build a new water treatment plant, replace waterlines and upgrade the wastewater system.

Figure 25: Innovative piping modifications to the effluent lines as they connect to the ocean outfall.

Project funding totaled $1.8-million with nine different funding sources. Early funding came from Alaska Village Safe Water and the Environmental Protection Agency (EPA) in 2001. Additional funding came in 2002 and 2003 from the Indian Health Service, the EPA Clean Water Act program, the Alaska Native Tribal Health Consortium (ANTHC), the North Pacific Rim Housing Authority, and a contribution from Tatitlek. Scope coordination was crucial in navigating

Figure 26: Access to the village is only by air or sea; heavy equipment, construction materials and supplies were brought in by barge.

the complicated granting processes. The difficult logistics of moving freight to rural Alaska adds to the complex logistics needed to meet construction schedules and stay within budgets.

The entire water system is gravity feed and does not need pumps. The energy efficient plant was designed with the operator's skill level in mind; attempting to achieve a balance of operational simplicity while meeting regulatory requirements.

Hauling materials to the water source was difficult because a trail did not exist. A unique, tracked, 6-wheel drive vehicle was purchased to transport workers and materials efficiently and safely to the site.

Figure 27: Gusty Wassillie, equipment operator, tests a newly installed fire hydrant.

This project also replaced 1,740 linear feet of leaking water mains and 1,425 linear feet of leaking water service lines connecting 26 homes to the existing community system. This project replaced the existing septic tank with three new tanks. One 2,000-gallon and one 5,000-gallon septic tank were installed on the east side of the village, and one 5,000-gallon septic tank was installed on the west side. Both tanks were positioned at a design elevation higher than sea level, which provided adequate driving head and eliminated the potential for seawater surcharge. This project replaced 1,516 linear feet of gravity sewer main, 500 feet of septic tank effluent mains, 4 manholes, 8 sets of cleanouts and 1,500 feet of sewer service lines to 26 homes.

Figure 28: A Tatitlek workman starts on the walls of the new water treatment facility.

Figure 29: Tatitlek's new 1,200 sqft surface water treatment facility produces 36,000 gallons of potable water per day.

Sanitation Facilities and Health

Protecting the health of and preventing disease among the American Indian and Alaska Native people are primary IHS objectives. The Congress declared in the Indian Health Care Improvement Act (P.L. 94-437, as amended), that "...it is in the interest of the United States that all Indian communities and Indian homes, new and existing, be provided with safe and adequate water supply systems and sanitary sewage waste disposal systems as soon as possible." Citing this policy, the Congress reaffirmed the primary responsibility and authority of the IHS "...to provide the necessary sanitation facilities..." as authorized under P.L. 86-121.

Figure 30: IHS engineers and inspector observe a lift station base reinforcement being placed under a lift station renovation project, Fort Apache Reservation.

A Report to Congress by the Comptroller General in 1974, noted that American Indian and Alaska Native families living in homes with satisfactory environmental conditions placed fewer demands on IHS' primary health care delivery system; i.e., those with satisfactory environmental conditions in their homes required approximately one fourth the medical services as those with unsatisfactory environmental conditions.

Figure 31: LT Chris Glime describes the design of a sanitary sewer bridge crossing to White Mountain Apache Utility personnel in Cibecue, Arizona.

The IHS considers the provision of sanitation facilities to be a logical extension of its primary health care delivery efforts. The availability of essential sanitation facilities is critical to breaking the chain of waterborne communicable disease episodes. Properly designed and operated facilities can reduce the incidence of disease by eliminating waterborne bacteria, viruses, and parasites which cause such illnesses

as salmonellosis, typhoid fever, cholera and giardiosis. In addition, many other communicable diseases, including hepatitis A, shigella, and impetigo are associated with the limited hand washing and bathing practices often found in households lacking adequate water supplies. This is particularly true for families that haul water.

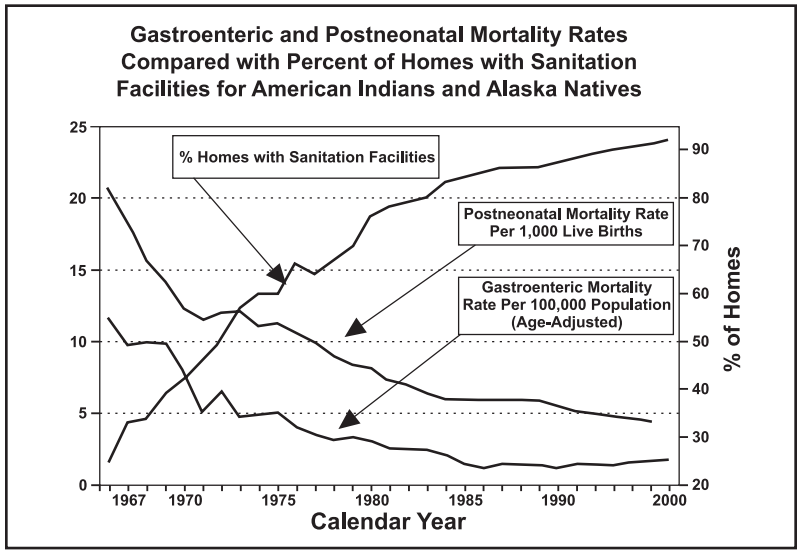

Figure 32: Graph of gastroenteric and postneonatal death rates versus the percent of Indian homes with potable water.

The availability of adequate sanitation facilities has value beyond disease intervention. Safe drinking water supplies and adequate waste disposal facilities are essential preconditions for most health promotion and disease prevention efforts. Consistently and optimally fluoridated drinking water, which can virtually eliminate tooth decay among children, is an example of this public health principle. Efforts by other public health specialists, such as nutritionists and alcoholism counselors, are enhanced if safe drinking water is readily available. Lack of indoor plumbing (sanitation facilities) is a significant risk factor for falls, which are a leading cause of injury related deaths for elders. Home health care nursing services are much more effective when safe water and adequate wastewater disposal systems are in place.

Several diseases are readily transmitted by contaminated water supplies, and those of greatest importance are infectious hepatitis; typhoid, cholera, and paratyphoid fevers; and dysenteries. In 1955, more than 80 percent of American Indians and Alaska Natives were living in homes without essential sanitation facilities. The age-adjusted gastrointestinal disease death rate for American Indians and Alaska Natives was 15.4 per 100,000 population. This rate was 4.3 times higher than that for all other races in the United States. In 1995, by contrast, the age-adjusted gastrointestinal disease death rate had decreased significantly to 1.7 per 100,000. A major factor in this significant gastrointestinal disease rate reduction is the SFC Program's efforts to construct water supply and waste disposal facilities. The 1995 rate is still 40 percent higher than the rate for all races in the U.S.

The SFC Program is a significant contributor to the improved health status of American Indians and Alaska Natives as clearly indicated by the decrease in the gastrointestinal disease death rate and concurrent increase in life expectancy.

Program Operations

The SFC Program is part of the IHS Office of Environmental Health and Engineering. The SFC Program's activities are supported by engineers, sanitarians, engineering technicians, clerical staff, and skilled construction workers.

There is an SFC Program in each of the 12 IHS Area Offices. The Program's Headquarters component, located in Rockville, Maryland, assists the Area Offices by establishing policies, providing guidance to ensure consistent and equitable program implementation nationwide, and interfacing with other Federal agencies.

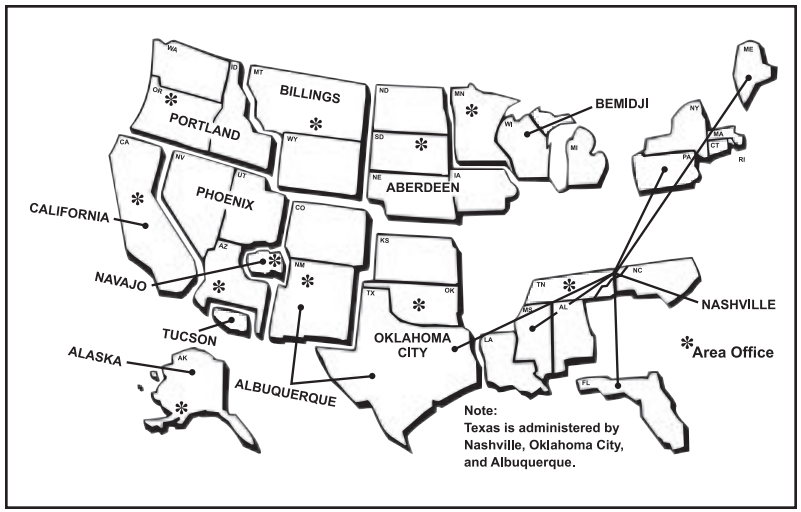

Figure 33: Location of Indian Health Service Area Offices.

The SFC Program works cooperatively with tribes and tribal organizations, tribal housing authorities, and with many governmental agencies, such as HUD, BIA, EPA, and USDA Rural Utility Service toward achieving its sanitation facilities construction objectives. An example are funds that are transferred by HUD to the IHS for sanitation facilities construction in support of new and renovated HUD homes, typically made available to the SFC Program through tribal entities and Indian housing authorities. Agreements among the tribes, Indian housing authorities, IHS, and HUD enable the transfer of HUD funds to the SFC Program for construction of necessary water and sewer facilities. Congress authorized IHS to accept the HUD contributions.

Figure 34: Alaskan native boy near existing well, Alaska.

Similar agreements among the tribes, IHS, and the EPA Indian Set-Aside Grants (ISA) Program enable the EPA to contribute the ISA wastewater funds to the SFC Program. States do not have jurisdiction on trust lands and, except for Alaska, provide relatively little assistance to Indian tribes and reservations for the construction of sanitation facilities. The State of Alaska, through its Village Safe Water program, participates in many jointly funded IHS construction projects in Alaska Native communities.

The SFC Program's efforts to provide sanitation facilities for American Indian and Alaska Native homes and communities benefits to 562 Federally recognized tribes and tribal organizations located in 35 States.

Sanitation facilities are provided, at the request of tribes, bands, or groups, for homes owned and occupied by American Indians and Alaska Natives who are eligible for assistance. Provision of water, wastewater, and solid waste facilities for commercial and industrial purposes is not authorized under P.L. 86-121 and are not addressed by the SFC Program.

Eligible sanitation facilities projects that are approved for implementation are classified under one of the following categories: 1) projects to assist new (non HUD funded) and like-new Indian housing (Housing Support Projects); 2) projects to serve existing homes and communities (Regular Projects); and 3) special/emergency projects.

Figure 35: Excavation for wet well lift station, Pleasant Point, Maine.

Figure 36: Completed lift station, Pleasant Point, Maine.

Housing Support Projects provide sanitation facilities for new homes and homes in like new condition for eligible Indian and Alaska Native families. These projects typically serve Indian homes being constructed or rehabilitated by the BIA-HIP, tribes, individual homeowners, or other nonprofit organizations.

Figure 37: IHS inspector Don Christensen inspecting the inside of new water sphere for Sac and Fox, Iowa.

Regular Projects provide sanitation facilities for existing Indian homes and communities. The SFC Program has established a Sanitation Deficiency System (SDS) for identifying and prioritizing projects to serve homes and communities with unmet water, sewer, and solid waste needs. This system is updated annually, and the information and funding requirements are submitted each year to the Congress in accordance with Indian Health Care Improvement Act requirements. A summary of the inventory of sanitation deficiencies is presented in the following pages.

Figure 38: Almost completed water sphere for Sac and Fox, Iowa.

Special/Emergency Projects provide sanitation facilities for special studies and emergency situations. Emergency projects typically involve community sanitation facilities which have undergone, or are expected to experience, sudden wide-spread failure that will directly affect the public health. Funding for special/emergency projects is very limited and all projects must be approved by the SFC Program Headquarters Office. The average project funding level is $20,000 to $50,000.

In addition to providing direct services for the construction of sanitation facilities, the SFC Program provides technical assistance on many issues related to construction and operation and maintenance of sanitation facilities.

Technical assistance, such as reviews of engineering plans and specifications for on-site sanitation facilities for new home construction, is routinely provided to tribes and Indian housing authorities. Technical reviews of feasibility studies and grant proposals are also routinely provided to tribes by the SFC Program for a wide range of civil and sanitation facilities engineering projects related to Indian Housing. The amount or degree of technical assistance provided depends on available resources.

Figure 39: Trench box installation, Santa Rosa Village, Tohono O'odham Reservation.

Upon project completion, the facilities constructed under the SFC Program are owned and operated by the tribe, individual homeowner, or other responsible non-Federal entity. The IHS provides technical assistance to the owners of the new sanitation facilities and provides training on proper operation and maintenance of the new facilities. Homeowners who receive individual sanitation facilities are instructed on the proper operation and maintenance of their newly installed wells and/or septic systems, and tribal operators are instructed on the correct operation and maintenance of community water and sewer facilities. The latter may include training in proper operation and maintenance of chlorination and fluoridation equipment, pumps and motor control systems for community water supply facilities, and proper operation and maintenance of sewage collection systems, lift stations, and wastewater treatment facilities.

The SFC Program also provides technical assistance to tribes in the development of tribal utility organizations for operation, maintenance, and management of community water and sewer facilities. This assistance may include development of rate structures to determine appropriate customer water and sewer fees.

As additional and more stringent environmental regulations regarding safe drinking water, sewage treatment and disposal, and solid waste disposal are issued, the IHS will continue providing technical support and consultation on environmentally-related public health issues to American Indian and Alaska Native tribes and individual homeowners.

Sanitation Deficiencies

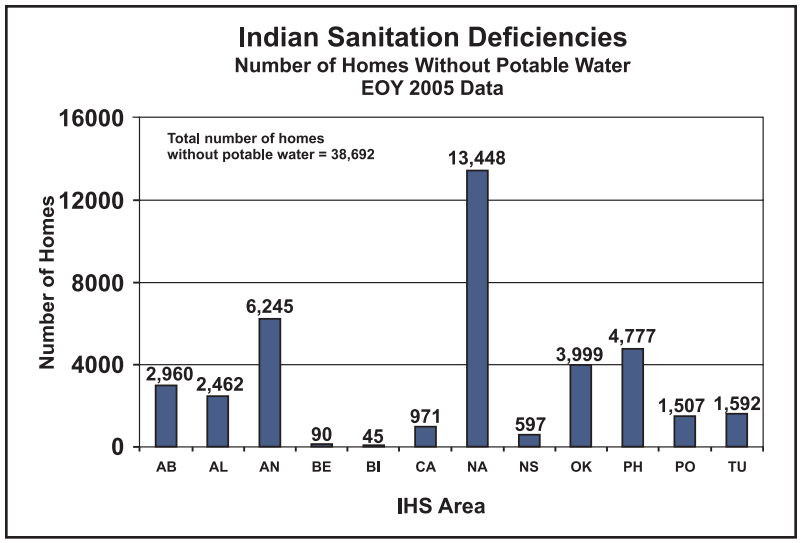

Figure 40: Number of Indian homes without potable water, by Area.

The Indian Health Care Improvement Act (IHCIA) requires the IHS to have a funding plan to provide safe water supply and sewage and solid waste disposal facilities to existing American Indian and Alaska Native homes and communities, and to new and renovated homes. In accordance with those requirements, the SFC Program annually estimates the total need to provide safe and adequate sanitation facilities for American Indian and Alaska Native homes and communities.

Sanitation deficiencies are reported as proposed projects or project phases. The current inventory of sanitation deficiencies identified more than 3,052 sanitation facilities construction projects or project phases at an estimated cost of $2 billion. These projects represent all unmet needs eligible for IHS funding. However, some projects are prohibitively expensive to construct and/or operate and are considered to be economically infeasible. Currently, 2,249 of the identified projects are considered to be economically feasible with an estimated cost of $990 million.

In an effort to reflect the relative impact on health of various water supply, sewage disposal, and solid waste deficiencies to be addressed, sanitation deficiency levels are determined for each project or project phase. The IHCIA defines the following deficiency levels:

Level I: The deficiency level describing an Indian tribe or community with a sanitation system that complies with all applicable water supply and pollution control laws, and in which the deficiencies relate to routine replacement, repair, or maintenance needs.

Level II: The deficiency level that describes an Indian tribe or community with a sanitation system that complies with all applicable water supply and pollution control laws, and in which the deficiencies relate to capital improvements that are necessary to improve the facilities in order to meet the needs of such tribe or community for domestic sanitation facilities.

Level III: The deficiency level that describes an Indian tribe or community with a sanitation system that has an inadequate or partial water supply and a sewage disposal facility that does not comply with applicable water supply and pollution control laws, or has no solid waste disposal.

Level IV: The deficiency level that describes an Indian tribe or community with a sanitation system which lacks either a safe water supply system or a sewage disposal system.

Level V: The deficiency level that describes an Indian tribe or community that lacks a safe water supply and a sewage disposal system.

The deficiency level assigned to a project is determined by the deficiencies of existing facilities. Projects are divided into phases, as appropriate, to provide logically independent and functional projects that can be funded in one year and which generally address one level of deficiency. Each proposed project or project phase will not necessarily bring the facilities for a community or tribe to level I deficiency or better. However, the combination of all projects reported for each community will bring all facilities to deficiency level I or better.

For several years IHS has stated that 7.5% of AI/AN homes were without potable (safe and reliable) water. Based on end of year 2005 data, it is estimated that approximately 12% of AI/AN homes are without a safe and reliable water supply. This increase in the number of AI/AN homes lacking safe water is due to inflation, population growth, the age and condition of the existing infrastructure, high numbers of new and like new housing, and new environmental regulations including the new Arsenic and Surface Water Treatment rules promulgated by the Environmental Protection Agency. The new arsenic rule accounts for most of this increase because approximately 65 communities with nearly 13,000 homes now classified as deficiency level 4, a community which lacks a safe water supply, for water as defined in IHCIA at 25 U.S.C. 1632. In order to meet the IHS strategic goal of raising the percent of AI/AN homes with safe water to 94% by 2010 a significantly larger increase in sanitation project and staff funding is required.

These deficiencies represent an enormous challenge, especially because the resources to meet them are finite. Existing sanitation facilities require upgrading while efforts continue towards providing services to many yet unserved and mostly isolated homes.

Figure 41: IHS personnel surveying in Gallup, New Mexico.

Figure 42: California Tribal operators at the IHS sponsored 4 day Water Treatment Operator Certification training.

In cooperation with the Office of Management and Budget (OMB), a Common Measure was developed during 2001 with the Rural Utility Service (RUS), the Bureau of Reclamation (BOR), the Environmental Protection Agency (EPA), and the IHS to allow direct comparisons between rural water programs within the federal government. The Common Measures agreed upon were the number of connections and the population served per million dollars of total project cost. It was recognized that BOR and IHS are direct service programs to a specific population, and EPA and RUS are grant/loan programs that can leverage funding with both of these programs mostly providing strictly upgraded services. The data is reported as east and west, excluding Alaska. The IHS compared favorably having provided 174 and 212 (east and west) services per million dollars compared with the BOR which provided 24 services per million dollars.

The Program Assessment Rating Tool (PART) is an OMB initiative performed on the SFC Program in 2002. The PART rates a program's purpose, design, strategic planning, program management and program results. The SFC Program scored 80%, which is a very acceptable score. A weakness of the SFC Program is that it has not had an independent Program review since 1974, and there has not been a recent benefit cost analysis on the value of sanitation facilities for AI/AN homes.

The SFC Program had an Independent Evaluation completed in 2005. As a result of that evaluation seven strategic direction areas were identified. Those areas included: Organizational Alignment; Resource Utilization and Deployment; Human Capital; Partner Relationships; Front-line Leadership /Management Development; Financial Management; and Portfolio Management. The SFC Program has initiated efforts to address these areas.

Tables 3 through 8 and corresponding charts illustrate the type, geographic location and associated costs of the sanitation deficiencies.

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TABLE 3
Number of Homes at Each Deficiency Level by Area

AREA	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	TOTAL
AB	1,500	5,085	12,475	2,881	362	22,303
AL	1,084	4,577	6,253	2,664	31	14,609
AN	7,449	2,850	4,606	915	5,894	21,714
BE	10,709	5,891	5,355	178	27	22,160
BI	1,941	4,520	7,052	50	20	13,583
CA	3,632	2,967	3,385	1,260	453	11,697
NA	8,923	6,013	27,295	5,835	8,172	56,238
NS	7,357	4,000	5,185	792	0	17,334
OK	64,676	2,661	21,525	3,808	929	93,599
PH	5,415	7,350	7,068	4,641	442	24,916
PO	995	6,910	3,838	1,755	10	13,508
TU	10	1,183	2,117	875	778	4,963
TOTAL	113,691	54,007	106,154	17,118	17,118	316,624

TABLE 4 Number of Homes Requiring Assistance by Type of Facility			
AREA	WATER	SEWER	SOLID WASTE
AB	15,644	10,024	13,795
AL	13,148	10,454	3,005
AN	12,172	11,575	5,427
BE	6,189	4,522	4,977
BI	9,493	5,801	5,497
CA	5,129	6,193	4,698
NA	27,574	16,571	36,048
NS	8,447	8,053	6,944
OK	10,402	4,372	20,577
PH	17,300	9,650	12,080
PO	5,874	5,092	8,919
TU	4,895	2,906	4,219
TOTAL	136,267	95,213	126,186

TABLE 5
Project Cost by Deficiency Level
Feasible Projects

AREA	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	TOTAL
AB	$0	$17,501,000	$53,036,700	$31,511,600	$4,538,500	$106,587,800
AL	$0	$32,769,733	$11,748,800	$3,484,800	$40,000	$48,043,333
AN	$0	$39,541,336	$119,741,388	$117,007,162	$794,000	$277,083,886
BE	$0	$8,082,760	$7,168,584	$2,463,070	$0	$17,714,414
BI	$0	$14,405,800	$18,044,923	$228,000	$0	$32,678,723
CA	$0	$3,295,536	$28,633,469	$21,577,514	$7,588,500	$61,095,019
NA	$0	$33,194,458	$11,814,175	$14,182,080	$133,297,320	$192,488,033
NS	$0	$22,578,760	$11,946,660	$8,833,564	$0	$43,358,984
OK	$0	$2,125,892	$30,338,348	$14,914,700	$1,444,000	$48,822,940
PH	$0	$47,620,000	$21,217,300	$16,762,000	$4,890,000	$90,489,300
PO	$0	$22,380,500	$14,073,100	$4,335,000	$0	$40,788,600
TU	$0	$5,559,200	$10,637,400	$8,052,000	$7,050,400	$31,299,000
TOTAL	$0	$249,054,975	$338,400,847	$243,351,490	$159,642,720	$990,450,032

Indian Sanitation Deficiencies

Cost Estimate for Feasible Projects
EOY 2005 Data

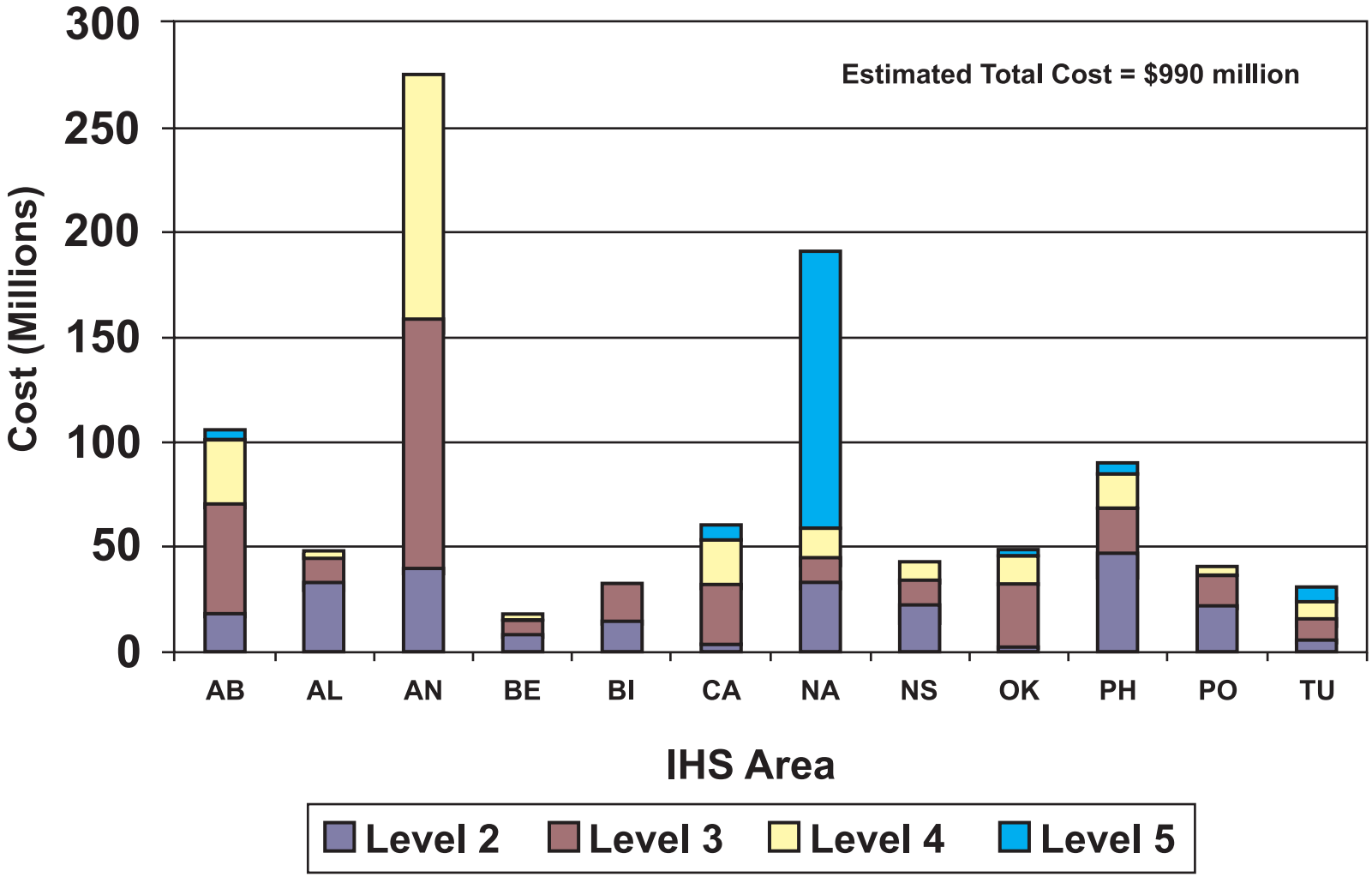


TABLE 6 Project Cost by Deficiency Level Total Database						
AREA	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	TOTAL
AB	$595,000	$32,764,000	$287,131,700	$39,984,100	$4,969,500	$365,444,300
AL	$3,833,000	$73,317,133	$18,154,000	$7,316,264	$40,000	$102,660,397
AN	$18,617,203	$98,057,542	$214,755,754	$281,257,704	$1,034,000	$613,722,203
BE	$227,375	$32,199,580	$18,447,004	$3,495,070	$0	$54,369,029
BI	$333,500	$15,005,950	$20,073,576	$228,000	$0	$35,641,026
CA	$0	$7,887,036	$33,022,669	$25,512,514	$7,588,500	$74,010,719
NA	$3,581,580	$165,406,765	$12,832,228	$16,281,952	$147,022,485	$345,125,010
NS	$0	$31,226,360	$31,388,160	$13,828,564	$0	$76,443,084
OK	$0	$2,613,892	$45,048,348	$24,789,856	$2,257,000	$74,709,096
PH	$1,905,000	$73,516,000	$25,993,300	$18,883,000	$12,390,000	$132,687,300
PO	$112,700	$30,278,500	$34,032,500	$7,616,527	$0	$72,040,227
TU	$0	$8,564,200	$18,256,900	$12,154,000	$14,229,100	$53,204,200
TOTAL	$29,205,358	$570,836,958	$759,136,139	$451,347,551	$189,530,585	$2,000,056,591

Indian Sanitation Deficiencies

Total Database - EOY 2005 Data

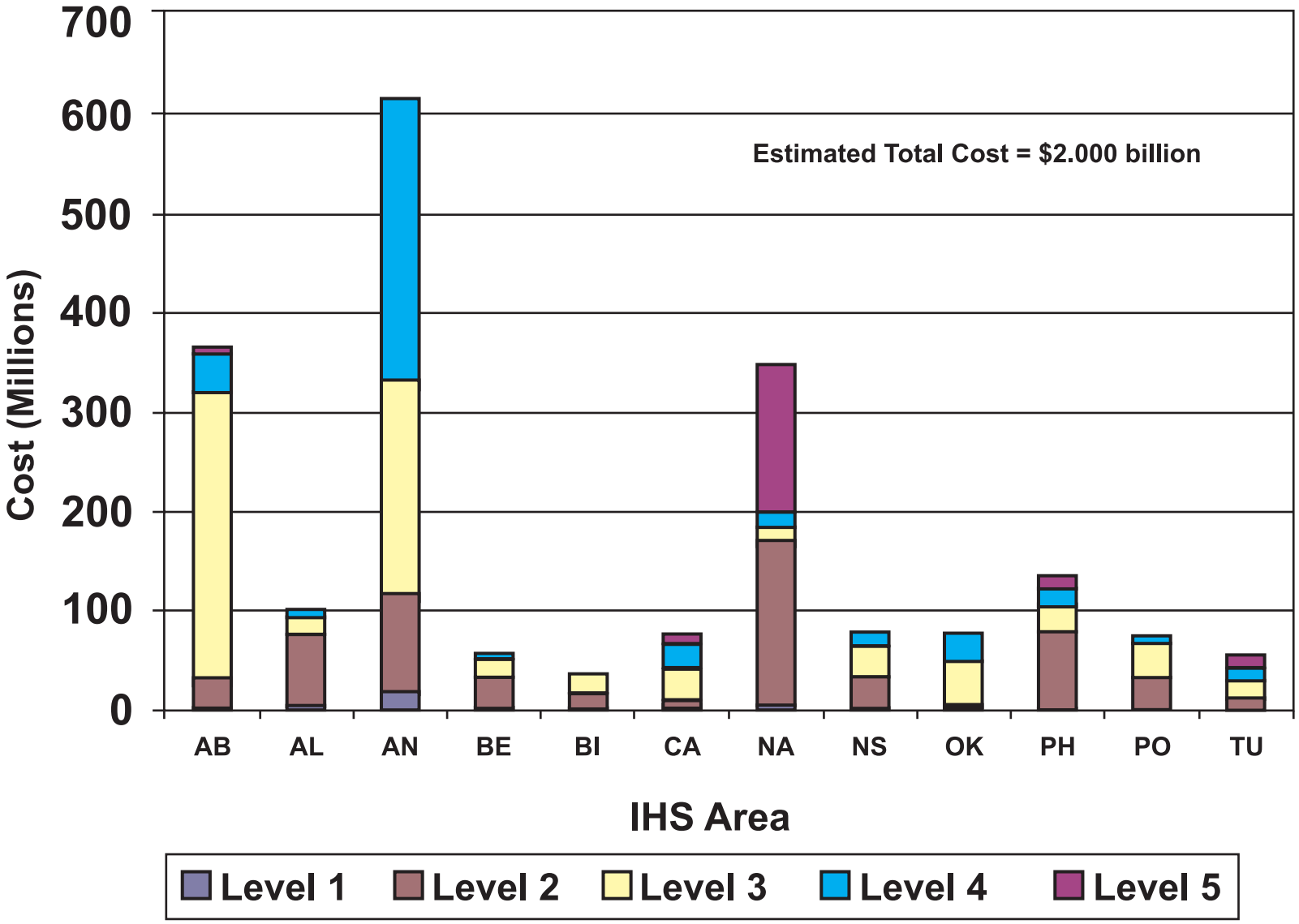


TABLE 7
Cost Estimates by Type of Needed Facility by IHS Area
Feasible Projects

AREA	WATER	SEWER	SOLID WASTE	O&M	TOTALS
AN	$78,389,845	$14,550,475	$13,206,600	$440,880	$106,587,800
BE	$31,431,033	$14,348,700	$2,036,200	$227,400	$48,043,333
BI	$131,548,468	$105,491,044	$39,886,374	$158,000	$277,083,886
CA	$8,674,664	$6,987,446	$2,052,304	$0	$17,714,414
NA	$17,751,813	$12,427,310	$2,499,600	$0	$32,678,723
NS	$18,948,395	$39,050,438	$3,035,186	$61,000	$61,095,019
OK	$120,789,562	$63,708,046	$7,990,425	$0	$192,488,984
PH	$25,760,196	$13,918,278	$3,660,210	$20,300	$43,358,548
PO	$37,745,462	$7,009,878	$4,067,600	$0	$48,822,940
TU	$53,603,800	$28,048,000	$8,634,000	$203,500	$90,489,300
AB	$24,203,500	$9,051,900	$7,506,200	$27,000	$40,788,600
AL	$21,064,700	$8,377,200	$1,686,100	$171,000	$31,299,000
TOTAL	$569,911,438	$322,968,715	$96,260,799	$1,309,080	$990,450,032

Current 10-Year Funding Plan to Address Indian Sanitation Deficiencies

Cost Estimates by Type of Facilities
EOY 2005 Data - Economically Feasible Projects

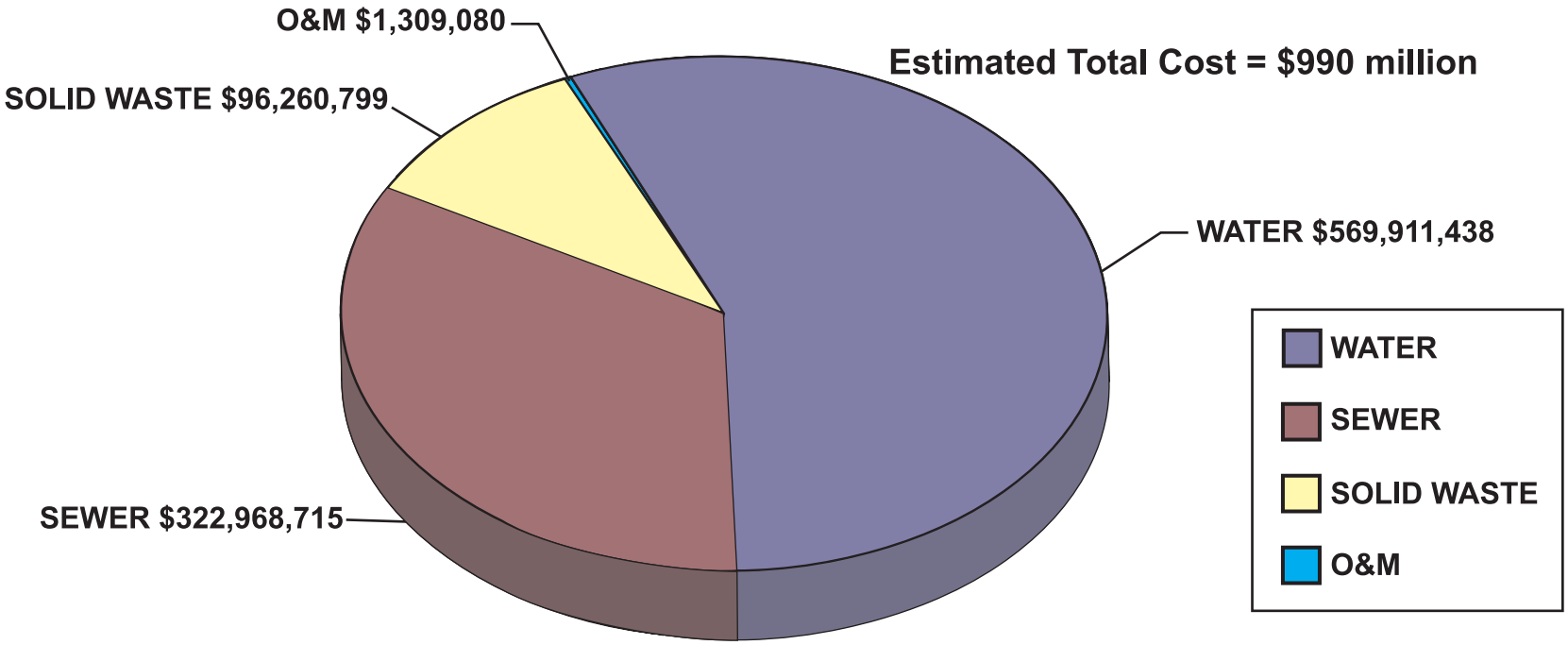


TABLE 8
Cost Estimates by Type of Needed Facility by IHS Area
Total Database

AREA	WATER	SEWER	SOLID WASTE	O&M	TOTALS
AB	$311,302,345	$35,683,475	$18,017,600	$440,880	$365,444,300
AL	$55,123,097	$44,482,700	$2,827,200	$227,400	$102,660,397
AN	$292,789,237	$233,266,172	$87,508,794	$158,000	$613,722,203
BE	$24,937,570	$26,959,155	$2,472,304	$0	$54,369,029
BI	$19,818,516	$13,322,910	$2,499,600	$0	$35,641,026
CA	$24,268,595	$44,999,938	$4,671,186	$71,000	$74,010,719
NA	$261,933,607	$73,140,978	$10,050,425	$0	$345,125,010
NS	$33,447,396	$39,233,178	$3,702,210	$60,300	$76,443,084
OK	$58,629,018	$12,012,478	$4,067,600	$0	$74,709,096
PH	$70,602,800	$52,915,000	$8,744,000	$425,5000	$132,687,300
PO	$42,211,127	$20,092,900	$9,680,200	$56,000	$72,040,227
TU	$31,222,100	$18,149,200	$3,389,300	$443,600	$53,204,200
TOTAL	$1,226,285,408	$614,258,084	$157,630,419	$1,882,680	$2,000,056,591

Cost Estimates by Type of Facilities

EOY 2005 Data - Total Database

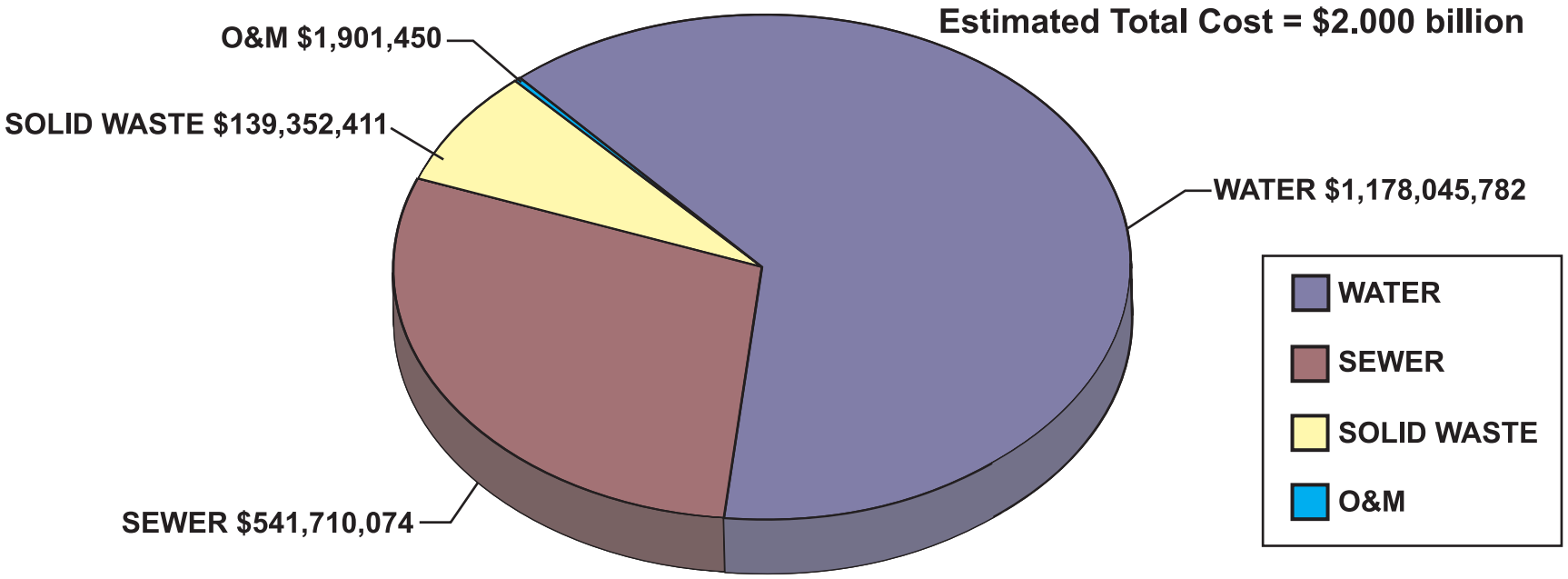
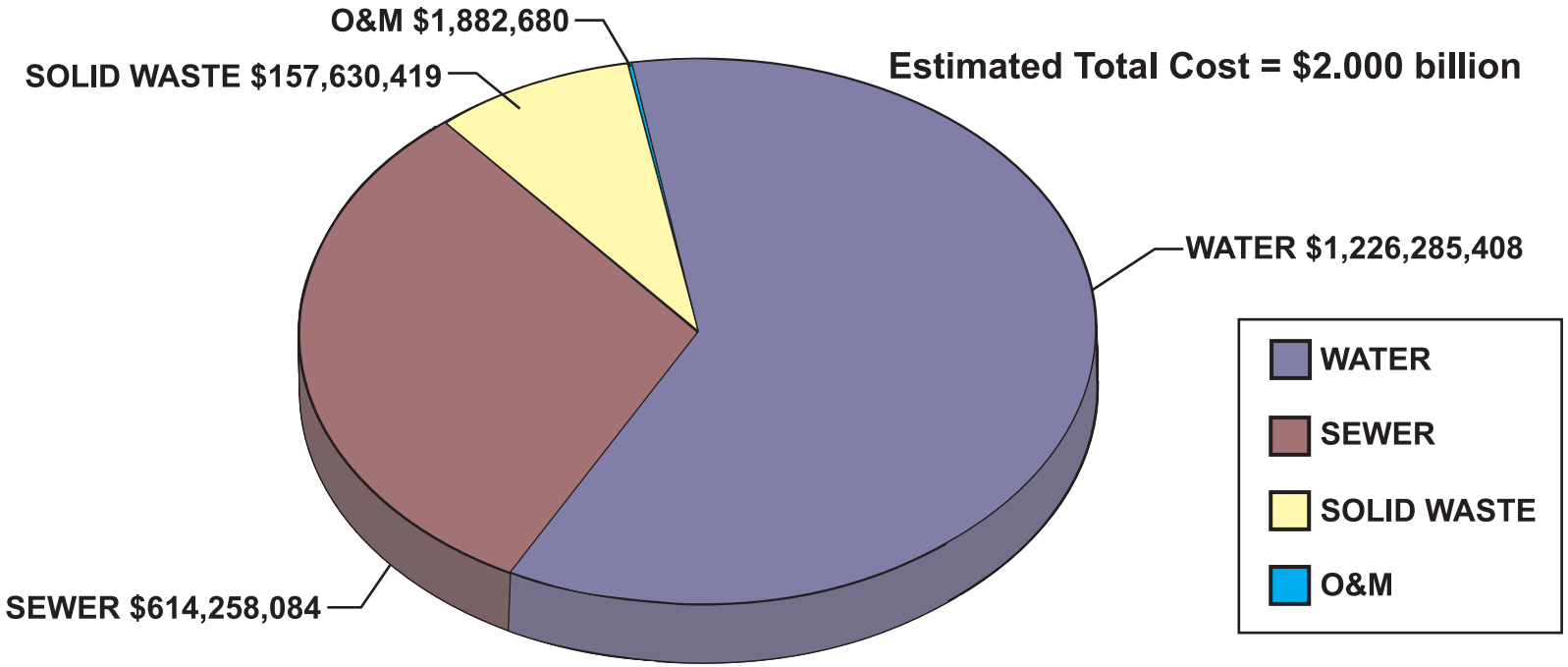


TABLE 9
Cost Estimates by Type of Needed Facility by IHS Area
Total Database

AREA	WATER		SEWER		SOLID WASTE		O&M	TOTALS
	HOMES	COST	HOMES	COST	HOMES	COST		
AB	15,644	$311,302,345	10,024	$35,683,475	13,795	$18,017,600	$440,880	$365,444,300
AL	13,148	$55,123,097	10,454	$44,482,700	3,005	$2,827,200	$227,400	$102,660,397
AN	12,172	$292,789,237	11,575	$233,266,172	5,427	$87,508,794	$158,000	$613,722,203
BE	6,189	$24,937,570	4,522	$26,959,155	4,977	$2,472,304	$0	$54,369,029
BI	9,493	$19,818,516	5,801	$13,322,910	5,497	$2,499,600	$0	$35,641,026
CA	5,129	$24,268,595	6,193	$44,999,938	4,698	$4,671,186	$71,000	$74,010,719
NA	27,574	$261,933,607	16,571	$73,140,978	36,048	$10,050,425	$0	$345,125,010
NS	8,447	$33,447,396	8,053	$39,233,178	6,944	$3,702,210	$60,300	$76,443,084
OK	10,402	$58,629,018	4,372	$12,012,478	20,577	$4,067,600	$0	$74,709,096
PH	17,300	$70,602,800	9,650	$52,915,000	12,080	$8,744,000	$425,5000	$132,687,300
PO	5,874	$42,211,127	5,092	$20,092,900	8,919	$9,680,200	$56,000	$72,040,227
TU	4,895	$31,222,100	2,906	$18,149,200	4,219	$3,389,300	$443,600	$53,204,200
TOTAL	136,267	$1,226,285,408	95,213	$614,258,084	126,186	$157,630,419	$1,882,680	$2,000,056,591

Cost Estimates by Type of Facilities

EOY 2005 Data - Total Database



The Challenge Ahead

The ultimate goal of the SFC Program is to provide adequate water and sewer facilities for all existing Indian homes. However, despite current funding levels, there are numerous factors that will continue to create additional sanitation facility needs in the future. These factors include population growth and the corresponding additional need for homes. The number of Indian families is increasing faster than new homes are being constructed, making it especially difficult to meet critical sanitation needs in many Indian communities.

Another factor is the need to upgrade or replace existing sanitation facilities when their useful design life is reached; the IHS began providing water and sewer systems to American Indian and Alaska Native communities over 45 years ago. This factor becomes increasingly critical as the reliability decreases and the cost of operating and maintaining older sanitation facilities increase. Despite an IHS emphasis on designing systems that are simple and economical to operate and maintain, the reliability of most community water and sewer systems in Indian country needs to be improved. The aging water and infrastructure needs are documented by the EPA, the General Accounting Office, and the American Water Works Association.

More stringent environmental standards and more difficult site conditions will challenge the SFC Program as it endeavors to provide needed sanitation facilities in years to come. Standards for public water supply systems, solid waste disposal facilities, and sewage treatment facilities are continually being modified by legislation and regulation.

The impact of these changes is generally most severe on small utility systems such as those serving American Indians and Alaska Natives. As a result of more stringent regulations, small systems will cost more to build and operate.

In the future, the technical and managerial skills of IHS and tribal staff to design, construct, and operate needed sanitation facilities in an environment with more fiscal and regulatory challenges will be tested. A true partnership among Tribes, Congress and IHS is needed if we are to meet these challenges successfully.

Figure 43: Kickapoo tribal boys enjoying cool, fresh water from the point-of-use water treatment station, Eagle Pass, Texas.

IHS Area SFC Program Directory

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Aberdeen, SD 57401
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Anchorage Area/DSFC
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Anchorage, AK 99508-5928
Ph. (907) 729-3540

Albuquerque Area/DSFC
5300 Homestead Rd., N.E.
Albuquerque, NM 87110
Ph. (505) 248-4595

Bemidji Area/DSFC
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Bemidji, MN 56601
Ph. (218) 444-0504

Billings Area/DSFC
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Billings, MT 59101
Ph. (406) 247-7096

California Area/DSFC
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Sacramento, CA 95814
Ph. (916) 930-3945

Nashville Area/DSFC
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Nashville, TN 37214-2634
Ph. (615) 467-1586

Navajo Area/DSFC
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Window Rock, AZ 86515
Ph. (928) 871-5851

Oklahoma City Area/DSFC
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Oklahoma City, OK 73112
Ph. (405) 951-3882

Phoenix Area/DSFC
Two Renaissance Square
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Phoenix, AZ 85004
Ph. (602) 364-5068

Portland Area/DSFC
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Portland, OR 97204-2892
Ph. (503) 326-2001

Tucson Area Indian Health Service
7900 South J Stock Road
Tucson, AZ 85746-2508
Ph. (520) 295-2580

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